ELSEVIER

European Journal of Operational Research 112 (1999) 696–697

EUROPEAN JOURNAL OF OPERATIONAL RESEARCH

Contents Volume 112

1 Editorial
R. Slowinski, J. Teghem and J. Wallenius
2 Publisher's Note
3 Resource-constrained project scheduling: Notation, classification, models, and methods
P. Brucker, A. Drexl, R. Möhring, K. Neumann and E. Pesch
42 Improving the efficiency of the purchasing process using total cost of ownership information: The case of heating electrodes at Cockerill Sambre S.A.
Z. Degraeve and F. Roodhooft
54 Formulating and solving production planning problems
L.J. LeBlanc, A. Shtub and G. Anandalingam
81 Match-up scheduling under a machine breakdown
M.S. Akturk and E. Gorgulu
98 Measuring and designing flexibility as a generalized service degree
Ch. Schneeweiss and H. Schneider
107 An approximation for computing the throughput of closed assembly-type queueing networks
H. Ayhan and M.A. Wortman
122 The general routing polyhedron: A unifying framework
A.N. Letchford
134 The asymmetric travelling salesman problem and a reformulation of the Miller–Tucker–Zemlin constraints
L. Gouveia and J.M. Pires
147 A simulated annealing algorithm with the random compound move for the sequential partitioning problem of directed acyclic graphs
T. Kaji and A. Ohuchi
158 Approximation algorithms for the oriented two-dimensional bin packing problem
A. Lodi, S. Martello and D. Vigo
167 Multiple bottleneck assignment problem
Y.P. Aneja and A.P. Punnen
174 Optimization of dual response systems: A comprehensive procedure for degenerate and nondegenerate problems
E. Del Castillo, S.-K. Fan and J. Semple
187 Average-discounted equilibria in stochastic games
J. Flesch, F. Thuijsman and O.J. Vrieze
197 Product form stationary distributions for the $M|G|k$ group-arrival group-departure loss system under a general acceptance policy
A. Economou and D. Fakinos
207 Development of a Neuro-Fuzzy approach for treating multimodal distributions and spurious clusters
G. Pauler
220 Decision making under partial probability information using pair-wise comparisons
C. Parkan , L.-F. Wang and M.-L. Wu
236 A note on the kinks at the mean variance frontier
J. Vörös, J. Kriens and L.W.G. Strijbosch
240 A note on robustness of the efficient DMUs in data envelopment analysis
V. Boljunčić
245 Book Reviews
H. Rleuren (ed.)

249 Multicriterion decision making in river basin planning and development
K.S. Raju and C.R.S. Pillai
258 Layout designs in cellular manufacturing
M. Bazargan-Lari
273 Reserve design for species preservation
M.A. Clemens, C.S. ReVelle and J.C. Williams
284 Operations planning for a multi-stage kanban system
B.R. Sarker and C.V. Balan
304 Stochastically minimizing the makespan in two-machine flow shops without blocking
J. Kamburowski

310 Financial credit-risk evaluation with neural and neurofuzzy systems
S. Piramuthu
322 Computing lower bounds by destructive improvement – An application to resource-constrained project scheduling
R. Klein and A. Scholl
347 The multiple resource constrained project scheduling problem: A breadth-first approach
T. Nazareth, S. Verma, S. Bhattacharya and A. Bagchi
367 Transitive calibration of the AHP verbal scale
J.S. Finan and W.J. Hurley
373 Geometry of decision making and the vector space formulation of the analytic hierarchy process
S. Zahir
397 A subjective and objective integrated approach to determine attribute weights
J. Ma, Z.-P. Fan and L.-H. Huang
405 Robust and neutral methods for aggregating preferences into an outranking relation
Ph. Vincke
413 An improved BL-algorithm for genetic algorithm of the orthogonal packing of rectangles
D. Liu and H. Teng
421 On the inverse problem of linear programming and its application to minimum weight perfect *k*-matching
S. Huang and Z. Liu
427 A note on efficient solutions for the linear bilevel programming problem
M. Soismaa
432 Gradient projection and local region search for multiobjective optimisation
J.-B. Yang
460 A decomposition approach for the fuel-constrained economic power-dispatch problem
S. Takriti and B. Krasenbrink
467 Graphical solution of $(n \times m)$ matrix of a game theory
S. Kumar and D.S.N. Reddy
472 Solution of 3×3 games using graphical method
K.G.K. Nair and G. Ranjith

479 Multicriterion decision making in performance evaluation of an irrigation system
K.S. Raju and C.R.S. Pillai
489 Ship maintenance scheduling by genetic algorithm and constraint-based reasoning
S. Deris, S. Omatu, H. Ohta, Lt. Cdr. S. Kutar and P.A. Samat
503 Extended optimal replacement model for deteriorating systems
S.-H. Sheu
517 Sensitivity analysis of a railway station track layout with respect to a given timetable
M.A. Odijk
531 Using the generalized assignment problem in scheduling the ROSAT space telescope
J. Nowakovski, W. Schwärzler and E. Triesch
542 Evaluating the impact of operating conditions on the performance of appointment scheduling rules in service systems
C.-J. Ho and H.-S. Lau
554 Optimal warranties, reliabilities and prices for durable goods in an oligopoly
G.A. DeCroix
570 A model for allocated versus actual costs in assignment and transportation problems
C. Pilot and S. Pilot
582 Travel time analysis for general item location assignment in a rectangular warehouse
E.P. Chew and L.C. Tang
598 Optimizing the natural gas supply mix of local distribution utilities
J.-M. Guldmann and F. Wang
613 Optimization models for quality and cost of modular software systems
H.-W. Jung and B. Choi
620 Clusters in a group: Decision making in the vector space formulation of the analytic hierarchy process
S. Zahir
635 Bandwidth packing with queuing delay costs: Bounding and heuristic solution procedures
A. Amiri, E. Rolland and R. Barkhi
646 Sojourn times in a random queue with and without preemption
A.J. Field and P.G. Harrison
654 Tighter relaxations for the cutting stock problem
C. Nitsche, G. Scheithauer and J. Terno
664 A new upper bound for the 0-1 quadratic knapsack problem
A. Billionnet, A. Faye and . Soutif
673 Implied constraints and LP duals of general nonlinear programming problems
P.K. Johri
682 Fuzzy MCDM based on ideal and anti-ideal concepts
G.-S. Liang
692 A note on rough sets and common knowledge events
H. Salonen and H. Nurmi